

Title (en)

Wafer release method and apparatus.

Title (de)

Verfahren und Einrichtung zur Freigabe einer Halbleiterplatte.

Title (fr)

Méthode et dispositif pour libérer une galette semi-conductrice.

Publication

EP 0615281 A1 19940914 (EN)

Application

EP 94301606 A 19940308

Priority

US 2915493 A 19930310

Abstract (en)

A wafer position and clamp sensor. A circuit (114) monitors capacitance between two electrodes (22,24) within a wafer support. With no wafer on the support, the capacitance falls in one range, with the wafer in place but not clamped, the capacitance falls in a second range and with the wafer held in place by an electrostatic attraction the capacitance falls in a third range. The sensed capacitance is converted to a frequency and then a D.C. voltage level that can easily be sensed and used to confirm wafer placement and then wafer clamping. After the wafer has been treated, the wafer is removed and the next subsequent wafer treated. A clamping voltage applied to clamp the wafer to its support is reversed at a controlled frequency to release the wafer. The voltage reversal disrupts the electrostatic attraction between the wafer and its support. <IMAGE>

IPC 1-7

H01L 21/00

IPC 8 full level

B23Q 3/15 (2006.01); **G01R 27/26** (2006.01); **H01L 21/265** (2006.01); **H01L 21/683** (2006.01)

CPC (source: EP KR US)

H01L 21/67259 (2013.01 - EP US); **H01L 21/68** (2013.01 - KR); **H01L 21/6831** (2013.01 - EP US)

Citation (search report)

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DOCDB simple family (application)

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